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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/631,195

07/31/2003

Gerard Chauvel

TI-35485 (1962-05419)

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02/10/2006

TEXAS INSTRUMENTS INCORPORATED

P O BOX 655474, M/S 3999

DALLAS, TX 75265

EXAMINER

MIZRAHI, DIANE D

ART UNIT

PAPER NUMBER

2165

DATE MAILED: 02/10/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/631,195	<b>Applicant(s)</b> CHAUVEL, GERARD	
	<b>Examiner</b> DIANE D. MIZRAHI	<b>Art Unit</b> 2165	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-25 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-25 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 31 July 2003 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>4-12-04;7-31-03</u> . | 6) <input type="checkbox"/> Other: ____.  |

III. DETAILED ACTION

Claims 1-25 are presented for examination and are pending.

Drawings

The Examiner contends that the drawings submitted on July 31, 2003 are acceptable for examination proceedings. These are informal drawings.

Claim Objections

Claim 11 is objected to because of the following informalities: Claim 11 depends on claim 11. Did Applicant intend for claim 11 to depend on claim 10? Appropriate correction is required.

Specification

The disclosure is objected to because of the following informalities:

There appears to be missing information (see specification, "Cross-Reference to Related Applications"). Appropriate correction is required.

Claim Rejections - 35 USC . 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter or any new and useful improvement thereof, may obtain a patent therefore, subject to the conditions and requirements of this title.

Claims 1-25 are rejected under 35 U.S.C. 101 because the claims are directed to a non-statutory subject matter, specifically, the claims are not directed towards the final result that is "useful, tangible and concrete.

(See State Street, 149 F.3d at 1373-74 USPQ2d at 1601-02).

According to the New Guidelines of October 26, 2005, which states that "A claim limited to a machine or manufacture, which has a practical application, is statutory. In most cases a claim to a specific machine or manufacture will have a practical application. See Alappat, 33 F.3d at 1544, 31 USPQ2d at 1557)... a specific machine to produce a useful, concrete, and tangible result and State Street, 149 F.3d at 1373-74 USPQ2d at 1601-02).

(Interim Guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility  
<[http://rs6.net/tn.jsp?t=mdmd7pbab.0.kbg76pbab.p9qiiibab.7440&p=http%3A%2F%2Fwww.uspto.gov%2Fweb%2Foffices%2Fpac%2Fdapp%2Fopla%2Fpreognotice%2Fguidelines101\\_20051026.pdf](http://rs6.net/tn.jsp?t=mdmd7pbab.0.kbg76pbab.p9qiiibab.7440&p=http%3A%2F%2Fwww.uspto.gov%2Fweb%2Foffices%2Fpac%2Fdapp%2Fopla%2Fpreognotice%2Fguidelines101_20051026.pdf)> )

The Supreme Court has repeatedly held that abstractions are not patentable. "An idea of itself is not patentable". Rubber-Tip Pencil Co. V. Howard, 20 Wall. 498, 07. Phenomena of nature, though just discovered, mental processes, abstract intellectual concepts are not patentable, as they are the basic tools of scientific and technological work Gottschalk v. Benson, 175 USPQ 673, 675 (S Ct 1972). It is a common place that laws

of nature, physical phenomena, and abstract ideas are not patentable subject matter Parker v. Flook, 197 USPQ 193, 201 (S Ct 1978). A process that consists solely of the manipulation of a data structure is not concrete or tangible. See In re Warmerdam, 33 F.3d 1354, 1360, 31 USPQ2d 1754, 1759 (Fed. Cir. 1994). See also Schrader, 22 F.3d at 295, 30 USPQ2d at 1459.

Therefore, Examiner believes that the above listed claims are nonstatutory.

**Claim Rejections - 35 USC § 102**

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

Claims 1-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Kelvin D. Nilsen et al. (U.S. Patent No. 6,081,665 and Nilsen hereinafter).

Regarding Claim 1, Nilsen teaches a system, comprising:  
memory device (col 5, lines 54-63); counter coupled to the  
memory device(col 18,lines 57-65), wherein the counter is  
adapted to monitor memory consumption of the memory device for  
one or more programs(col 17,lines 60-67 to col 18,lines 1-43); a  
plurality of processors coupled to the counter, wherein one of  
the plurality of processors within the system is coupled to a  
garbage collector adapted to free a portion of unused memory(col  
17,lines 60-67 to col 18,lines 1-43); and wherein executing the  
garbage collector (col 4,lines 63-67)is triggered based on a  
value of the counter (col 31,lines 20-31)(col 5 ,lines 1-5).

Regarding Claim 2, Nilsen teaches wherein the value is a  
programmable threshold value, and wherein when the counter  
reaches the programmable value, the garbage collector is  
triggered (col 39, lines 42-45).

Regarding Claim 3, Nilsen teaches wherein upon reaching the  
programmable threshold value, the counter sends an interrupt  
value to the processor, which executes the garbage collector  
(col 38, lines 4-10).

Regarding Claim 4, Nilsen teaches a software process is

regularly polling the counter to check if the predetermined threshold value has been reached, and wherein upon reaching the predetermined threshold value, the garbage collector is triggered (col 47, lines 30-65) (col 17, lines 45-63).

Regarding Claim 5, Nilsen teaches wherein the system further comprises a decoder coupled to the counter, wherein upon decoding an instruction requesting memory allocation, the counter is updated with an estimated memory usage value for the (col 42, lines 59-67 to col 43, lines 1-3) (col 43, lines 23-28)

Regarding Claim 6, Nilsen teaches wherein the system further comprises a micro-sequence replacing an instruction requesting memory allocation, wherein upon executing an instruction from the micro-sequence requesting memory allocation, the counter is updated with an exact memory usage value for the instruction (col 42, lines 59-67 to col 43, lines 1-3) (col 43, lines 23-28).

Regarding Claim 7, Nilsen teaches wherein the counter is updated by a value stored within the memory device (col 42, lines 57-67) (col 43, lines 22-42).

Regarding Claim 8, Nilsen teaches wherein a software process is triggered by an instruction that requests memory allocation, and wherein prior to performing or requesting another memory allocation task, the software process increments a counter indicative of the memory consumed (col 4, lines 63-67 to col 5, lines 1-5).

Regarding Claims 9-25, these claims are similar in scope to the rejected claims above and are therefore rejected as set forth above.

**Other Prior Art Made of Record**

The prior art made of record and not relied upon is considered pertinent to Applicant's disclosure. U.S. patents and U.S. patent application publications will not be supplied with Office actions. Examiners advises the Applicant that the cited U.S. patents and patent application publications are available for download via the Office's PAIR. As an alternate source, all U.S. patents and patent application publications are available on the USPTO web site ([www.uspto.gov](http://www.uspto.gov)), from the Office of Public Records and from commercial sources. For the use of the Office's PAIR system, Applicants may refer to the Electronic Business Center (EBC) at <http://www.uspto.gov/ebc/index.html> or



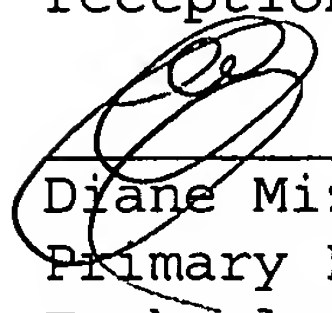
1-866-217-9197.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Diane D. Mizrahi whose telephone number is 571-272-4079. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jeffrey Gaffin can be reached on (571) 272-4146. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 872-9306 for regular communications and (703) 305-3900 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 305-3900.



\_\_\_\_\_  
Diane Mizrahi  
Primary Patent Examiner  
Technology Center 2100

February 4, 2006